DOCUMENT RESUME

ED 356 730 HE 026 386

AUTHOR Mingle, James R.
TITLE Faculty Work and the Cost/Quality/Access Collision.
INSTITUTION Education Commission of the States, Denver, Colo.; State Higher Education Executive Officers Association.
SPONS AGENCY Pew Charitable Trusts, Philadelphia, PA.; Virginia State Council of Higher Education, Richmond.
PUB DATE 27 Oct 92
NOTE 17p.; For related documents, see HE 026 383-385.
AVAILABLE FROM State Higher Education Executive Officers or ECS Distribution Center, 707 17th Street, Suite 2700, Denver, SO 80202-3427 ($5, prepaid).
PUB TYPE Information Analyses (070) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Access to Education; Budgeting; *College Faculty; Compensation (Remuneration); Educational Quality; Expenditures; *Faculty College Relationship; *Faculty Workload; Governance; Higher Education; Incentives; Policy Formation; *Productivity; State Aid; Tenure; Universities

ABSTRACT

This report examines the issue of faculty workload within the context of rising educational costs and educational demand and its impact on quality and access. Research on the questions of how hard faculty work, what they do with that working time, and especially how much time is spent in the classroom is discussed. Faculty workload studies are showing that (1) faculty are working longer hours than they ever have (averaging 54 hours per week); (2) teaching loads ranged from a low of 6.4 hours at research institutions to a high of 15.2 hours at liberal arts and two-year colleges; and (3) full-time faculty at research universities average about 3 hours per week with undergraduates, while faculty at comprehensive universities average 8.4 hours a week. In addition, workload studies are showing a shift from teaching to research, particularly in research and doctoral-granting institutions, caused by the substantial growth in available research dollars and the increasing competition for tenure. The report concludes with a discussion of the alternatives for managing faculty resources over the next decade. Alternatives discussed include connecting tenure and promotion criteria with adoption of state and campus mechanisms that explicitly recognize both research and teaching, and linking faculty pay and incentives to research and teaching, and faculty pay and incentives linked to decentralized budgeting strategies in colleges and departments. (GLR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED356730

HE

Faculty Work and the Cost/Quality/Access Collision

James R. Mingle

BEST COPY AVAILABLE

SHEEO

HE 026 206

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

SHEEO

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Faculty Work and the Cost/Quality/Access Collision

James R. Mingle

A Presentation to
Members of Boards of Visitors
Virginia Institutions

Sponsored by the State Council of Higher
Education for Virginia

Richmond, Virginia
October 27, 1992

SHEEO

A joint publication of the State Higher Education Executive Officers and the Education Commission of the States, with support from the Pew Charitable Trusts.

State Higher Education Executive Officers

Dr. James R. Mingle is the executive director of the State Higher Education Executive Officers.

Copies of this report are available for $5.00 prepaid from the State Higher Education Executive Officers, 707 17th Street, Suite 2700, Denver, CO 80202-3427, 303-299-3686.

The State Higher Education Executive Officers is a nonprofit, nationwide association of the chief executive officers serving statewide coordinating boards and governing boards of postsecondary education. Forty-nine states, the District of Columbia and Puerto Rico are members.

Faculty Work and the Cost/Quality/Access Collision

In a recent speech, Anne Pratt of the Virginia Council staff concluded that "we are on a collision course with demography, in the states, across the nation and around the world." By this Anne meant that more and different kinds of people are seeking higher education. Like a ship headed for the rocks, we may flounder in the process. The collision course involves three vectors — cost, quality and access. By cost I refer to the underlying production function of colleges and universities which is both labor intensive as well as demanding in capital investment. By quality, I refer to a definition which sets a standard using comparative cost data as evidence of quality, built around the premise that the more we spend, the better we are. (There are alternative definitions of quality but they are clearly secondary in higher education — value-added concepts of quality, or "meeting or exceeding the expectations of our customer.") By access, I refer to the goal of meeting the demands of the marketplace, namely, to respond to the desires of the American people for a higher education experience.

So what is the dilemma? It is simply this: Given our definition of quality, we cannot improve without raising unit costs. And if we raise costs, we will be unlikely to meet demand. And demand is up across the country. It is up because of the competitiveness and flux of the job market. It is up because women have entered the job force and want to upgrade their skills. It is up because minorities and the new immigrants believe in the American dream even more fiercely than the old European immigrants. And it is up because the school reform movement keeps hammering the message of raised expectations, higher standards, and a college track for all.

In short, we have now defined access as a universal concept. Participation in some form of postsecondary education is an expectation for all of our citizens throughout their adult life.

I call this a collision course because one or more of these factors — cost, quality or access — will have to change or be significantly altered, maybe all three in the decades ahead. One possible scenario is that we will not change our cost structure or our definition of quality and therefore will have to cut back on access. Another is that we will do our best to accommodate the enrollment demand without changing the production function and in the process see a diminution of quality. The third possibility is that we will redesign this ship — cut our costs, change our definition of quality and our programs and meet the needs of our customers.

This interconnection between costs, quality, and access in higher education has surprising parallels in another service industry which has been the subject of a national debate: health care. We cannot begin to expand access to health care to the many in society who have none unless we control the costs of the current system. This is our dilemma in higher education as well.

Some of our critics in higher education suggest we might construct a delivery system which is more relevant to our needs and that would actually cost less. Maybe yes, maybe no. I'm not hear to argue that quality is unrelated to costs, but rather to illustrate how we face the tough choice of either altering our delivery system and improving its effectiveness or dramatically reversing our 30-year-old commitment to expanded access.

What does this have to do with faculty and faculty work? Everything, of course. Faculty salaries constitute the single largest expenditure in your budgets and for the state as a whole, probably the single largest state expenditure outside of school teacher salaries. Many other costs are going up in higher education as well — administrative costs, student support services, library, and computing costs. Others would go up if we had the ability to pay for them such as maintenance, equipment, and capital construction costs. As dramatic as the cuts in state support have been, much of the impact of these cutbacks has been cushioned by tuition increases. But tuition increases require compensating student aid, and public institutions will find out, like the

privates did, that there is a diminishing return on every dollar of tuition increase because of the need to increase financial aid. And while you are raising tuition, the politicians are expanding the definition of financial need. The biggest single change in federal higher education policy this past year was extension of federal aid programs to the "middle class." There was, of course, no expansion of the total dollars available. The result will be reduced grants to the poorest to accommodate the expanded pool.

At some point, then, you will be faced with the diminishing value of raising tuition, either because it produces little new revenue or you reach the limits of students' willingness or ability to pay. Even if you continue to raise tuition, you are likely to get increasing pressure to reorganize the enterprise to meet the needs of those now paying a higher share of the tab.

Here is what board members in other states face.

- California — Many have suggested that California is an economic, demographic, and social bellwether for the nation. If so, consider these prospects: continuing state budget problems, dramatic increases in tuition, and enrollment demand projections in the range of 700,000 new students in the decade ahead from a wide variety of minority and ethnic groups. This year's response from the California State University System? They are cutting enrollment by 20,000 students and holding off the faculty union's demand for a reduction in standard workload from 12 to 9 hours.
- Arizona — Also faced with increasing demand for higher education, especially from minorities, the Arizona Board of Regents is planning for expansion of the system. If the Regents choose the research university model for this expansion, their annual personnel costs could be $30 million higher than other models. Meanwhile appropriations rose by 1% during the past two years — healthy increases by the new standards reported in the

Chronicle of Higher Education last week, which listed half the states actually declining in appropriations.

- Utah and Minnesota — In both of these states, demand for higher education continues unabated. Each is considering the conversion of two-year campuses to four-year baccalaureate programs. This is not a new phenomenon but what is new is that institutions are being asked to develop academic plans which fund the expansion on the new revenue generated from tuition only. The short answer is that you cannot get from here to there with traditional assumptions about administrative costs, delivery systems and faculty workload.

Faculty Workload Studies

Not surprisingly, these financial pressures have generated more than a few demands from legislators, and increasingly from journalists, for answers to questions about how hard faculty work, what they do with that time — especially how much of it is spent in the classroom. In a recent SHEEO survey of the states and large multicampus systems, we found an increasing number who were undertaking legislatively-directed or -encouraged studies of faculty workload.

For those close to higher education, these questions sound threatening, naive, and occasionally anti-intellectual. Sometimes they are, but I suggest that boards be prepared to answer the questions directly and honestly. (Journalists who don't get the answers are doing their own "studies" of faculty workload.) We also have a more aggressive consumer who cares little about the total costs, just his share. The question goes like this: Now tell me again, why is my tuition going up and my ability to get the classes I need for graduation going down?

At SHEEO, we undertook our own efforts to answer these questions about faculty workload. What did we find?

First, we found that faculty are working longer hours than they ever have, with a national average of about 54 hours per week in self-reported studies (see Table 1). These studies, whether at the national or state level, are remarkably consistent. They also show increases in the hours worked over the past four decades. I believe this has occurred because the professorate is more qualified, more professional, more committed to a diverse set of activities, and more competitive than it has ever been. Even if you discount the figures for a broader definition of "work" than other professions might employ (i.e., work at home versus work at the office), they represent a substantial amount of time commitment, one which is not likely to grow even with public pressure.

TABLE 1
FACULTY WORKLOAD

	Hours per Week in Classroom	Total All Activities
All	9.8	53
Research	6.4	57
Doctoral	8.5	54
Comprehensive	10.6	52
Liberal Arts	15.2	52
Two-Year	15.2	47
ALL RESPONDENTS	8.5	54

Source: U. S. Department of Education, National Survey of Postsecondary Faculty, 1988.

More important to the public, however, may be the question of how this time is spent. Specifically, how much time is spent in the classroom, preparing for class, and working with students? Generally, studies of faculty members in four-year institutions have found that faculty spend about half of their time either in class, preparing for class or advising students. The

remainder is spent in administrative activities, research, and, for about a third of the faculty, in some consulting.

As for the question of teaching load, which is probably the most often-asked question, we have some national data available. Table 1 presents the average number of hours per week spent in classroom teaching by type of institution. There is a substantial range in various types of institutions, from a low of 6.4 hours in research universities to a high of 15.2 in community colleges.

Have teaching loads changed significantly over time? This is more difficult to answer. Reports from the 1920-30's noted teaching loads in universities that were as high as 13 and 14 hours, but this was prior to the massive expansion of research activity that followed World War II. In a 1960 study sponsored by the American Council on Education, faculty reported teaching loads in a group of 10 research universities at 7.6 hours, about an hour a week more than the 1988 data in Table 1. While this represents a relatively small change, this "research university" standard for teaching load is now applied to a much larger number of faculty and institutions than existed in 1960.

Table 2 compares faculty teaching loads of undergraduates in three national studies done over a fifteen-year period (no national comparative data of total teaching load exists). These surveys suggest that teaching loads during this period have been quite stable (ranges are used because of anomalies in the data which do not provide precise figures). Our latest data on faculty teaching loads is from 1988, however, prior to the period of financial cutbacks. It may be that teaching load has increased in response to financial cutbacks, although there are indications that adjusting teaching load is one of the last responses institutions take to financial stress.

TABLE 2
ESTIMATED MEDIAN UNDERGRADUATE HOURS PER WEEK
(all full-time faculty)

	1975	1984	1989
Research	3.4-3.8	3.4-3.6	2.6-3.8
Doctorate-granting	5.6-6.0	5.5-5.7	4.6-6.4
Comprehensive	9.6-9.8	9.2-9.3	8.4-8.4
Liberal Arts	9.7-9.9	9.5-9.6	9.2-9.6
Two-year	13.8-13.9	14.2-14.3	13.7-14.6
ALL RESPONDENTS	8.9-9.3	7.7-9.0	8.4-9.2

Source: Data supplied by the Carnegie Foundation for the Advancement of Teaching

Another question often asked, especially of faculty in research and doctoral-granting institutions, is how much time do senior faculty spend with undergraduates, especially with freshmen and sophomores? We see in Table 2 that the answer is not a great deal: full-time faculty in research universities average about three hours per week with undergraduates; faculty in doctoral-granting institutions average about five or six hours a week.

In Arizona the question was asked in a somewhat different manner: What percentage of course offerings for freshmen and sophomores are being taught by the regular faculty? (Or conversely, how much are T.A.s and part-timers used to instruct freshmen and sophomores?) At the University of Arizona it was found that nearly seven out of every 10 freshman classes (69%) were being taught by T.A.s or adjuncts, while only one in 10 (9%) was being taught by a full professor. Not every public research university utilizes T.A.s to this degree, but it is safe to say that the use of T.A.s to educate underclassmen in large public universities is substantial. It is also under considerable public attack. The Arizona study was legislatively directed and you can

guess one proposal being pushed on the board: a mandate that every faculty member will teach an undergraduate course.

In our investigation of this issue, we also explored the question of the changing attitude of faculty about teaching and research. National surveys of faculty provide clear evidence of what we have heard anecdotally: a shift of emphasis from teaching to research has occurred in the past two decades. Table 3 takes data from four Carnegie surveys over the past twenty years. Respondents were asked to answer the question, "Do your interests lie primarily in teaching or in research?" The shift away from teaching and toward research has been most dramatic in research and doctoral-granting institutions, but is apparent to some degree in all types of institutions. Questions about the difficulty of obtaining tenure without publications show similar shifts; i.e., more faculty in all types of four-year institutions now agree that it is difficult to gain tenure without a publications record (see Table 4). This shift, I believe, is the result of the substantial growth in available research dollars and the increasing competitiveness for tenure. Faculty also report in both national and state surveys that if they were to change jobs, they would like to do more research and less teaching.

Despite the growing inclination, or mandate, to do research, the majority of the American professorate, except in research institutions, believe that teaching effectiveness should be the primary criterion for achieving tenure (Table 3). This sounds like a mixed message, but it probably reflects the reality of the market place. Teaching credentials are hardly portable, while research credentials can be carried from institution to institution. The majority of faculty are playing the game, but there is evidence they do not find it appropriate to their evaluation and their jobs. This suggests that with the right incentives they will respond.

TABLE 3
Do Your Interests Lie Primarily in Teaching or in Research?
(Percent Very Heavily in Teaching or Learning Toward Teaching)

	1969	1975	1984	1989
Research	57%	49%	39%	36%
Doctorate-granting	71%	66%	63%	57%
Comprehensive	86%	84%	75%	78%
Liberal Arts	90%	85%	85%	84%
Two-Year	95%	94%	92%	93%
ALL RESPONDENTS	76%	75%	70%	72%

Source: Carnegie Foundation for the Advancement of Teaching

TABLE 4
It Is Difficult for a Person to Receive Tenure if He/She Does Not Publish
(Percent Strongly Agreeing or Agreeing with Reservations)

	1969	1975	1984	1989
Research	74%	86%	92%	94%
Doctorate-granting	55%	67%	85%	88%
Comprehensive	19%	33%	54%	65%
Liberal Arts	18%	22%	35%	39%
Two-Year	6%	9%	8%	7%
ALL RESPONDENTS	41%	46%	55%	59%

Source: Carnegie Foundation for the Advancement of Teaching

Board Responses

For purposes of stimulating discussion, I would like to suggest several alternatives for managing faculty resources over the next decade. Some are minor changes, others are more radical. Some may apply to one type of institution and not to others. Some hold the prospect of creating real change; others are likely to be cosmetic and even unproductive.

1. Legislative or board actions to establish specific mandates for faculty teaching loads. These are very appealing, at least to legislators, primarily because they are an easy, quick fix, which is probably why they will not work. They are ignored and circumvented because all the incentives push faculty the other way. Probably the biggest negative impact of legislatively-mandated or union-negotiated workloads is they undermine the academic management responsibilities of departments and colleges.

2. Connect tenure and promotion criteria with institutional mission. One of the biggest changes we see at the state and system levels is to move beyond procedural guidelines for tenure to include substantive criteria. For example, tenure criteria should match the institutional mission or include explicit measures of teaching effectiveness. I find this an improvement but again of only limited value.

3. State and campus funding mechanisms that explicitly recognize research and teaching. A number of states have adopted various competitive grant programs and line-item appropriations targeted at both teaching and research. We may see more of this as states become concerned about the implicit funding they provide for research through formula guidelines. We may also see base budgeting changes which will make this research support explicit and distributed as current federal research support is — on a competitive basis. The goal should be to target state dollars on the most productive researchers and reallocate dollars to support teaching. We may find institutions "outfitting" good teachers with labs and grading assistants and technology in the same way they have outfitted research superstars.

4. The development of differential faculty tracks. This is a natural outgrowth of the work of Ernest Boyer, who has written persuasively on the need for a broader definition of research to include four distinctive types of scholarship: discovery, integration,

application, and teaching. Differential tracking suggests that even within the same department — say, a department of economics at a research university — different expectations would be used for different faculty, namely, a teaching, research or service track. Opponents to tracking believe such moves will create a permanent and inferior teaching track. They argue further that the same faculty may wish to emphasize different activities at different times in their career. We already have, of course, a tracking system in higher education, in the form of a largely unrecognized, untrained, and poorly-rewarded teaching cadre of T.A.s, adjuncts, and full-time remedial or developmental faculty.

5. Professional development for teachers. Demographics and the changing needs of society suggest that we may no longer be able to get by without an explicit education in pedagogy for college faculty (or at the very least, training for T.A.s). School teachers are criticized for being long on pedagogy and short on content. For higher education faculty, the opposite may be true. They know little about how students learn but are long on content. In short, they use the teaching strategy they were educated by, one which we might call "Sage on a Stage."

6. Curriculum reform. Now we begin to get into the more radical and difficult changes. Significantly improving faculty productivity is likely to require substantial change in curriculum. One way to do so is to add structure to the curriculum. As you add structure, and eliminate electives, you will lower unit costs. You are also likely to force faculty to sit down with one another and reach some consensus over what the essentials are, what experiences, knowledge and skills students need to succeed. A dean at the University of Pennsylvania recently suggested in the Chronicle that as much as 20-30% of the curriculum could be pared.

7. Use of technology. Maybe the answer to improving faculty productivity is not to have faculty teach more, but to teach less, and differently. I do not believe we have begun to reach the limits of "any time, any place" education. I do believe that technology and imaginative courseware have the potential to be more interactive than current approaches, certainly more interactive than the "Sage on a Stage" delivery system.

8. Finally, I ask you to consider whole new faculty pay and incentive systems linked to decentralized budgeting strategies in colleges and departments. Let me give you a few examples. What if we had pay and promotion policies that linked faculty directly to institutional goals, rather than to external discipline-based incentives? What if, for example, we had compensation systems which were base plus incentives? We could price our courses according to our institutional priorities, allow qualified faculty to bid on those courses to add to their base, or to bid on pooled research or teaching improvement funds to add to their base. With such an approach, tenure would assure the base but not the supplement. Or we could establish group reward structures where members of the department share a portion of the fruits from productivity improvements, cost-cutting and consulting contracts, not unlike reward systems used among the partners of a law firm. Even if we don't go this far, we might at least expect that all faculty face squarely the revenue and cost implications of how they spend their time.

There are several lessons which we might learn from the data on faculty workload and from the experience of other professions and service industries. From the health care field, it is apparent that those who pay the costs will eventually seek to control the costs. Without internal cost control in higher education we can expect both state and federal intervention as well as consumer revolt. Second, productivity problems are often rooted in a confusion about priorities and customers. We seem to be selling research when what the customer wants to buy is

instruction. Third, there is no reason to believe that with some imagination we cannot both protect the autonomy of faculty to define their own agenda as well as gain greater commitment to institutional and state objectives. Finally, like American business, we are going to have to "customize" our delivery system, not to eliminate the model of faculty as researcher, but to add equally-competitive and attractive models that will motivate and reward different kinds of productivity to serve society's needs.